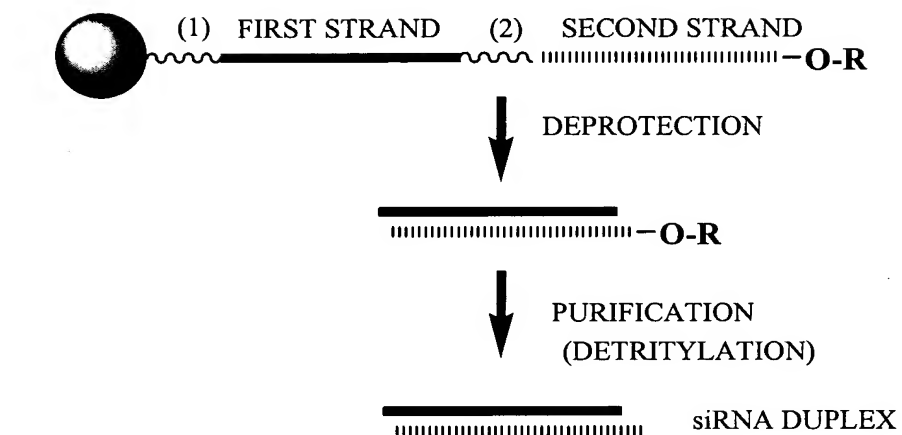


**Figure 1**

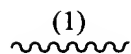


= SOLID SUPPORT

**R** = TERMINAL PROTECTING GROUP

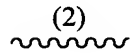
FOR EXAMPLE:

DIMETHOXYTRITYL (DMT)



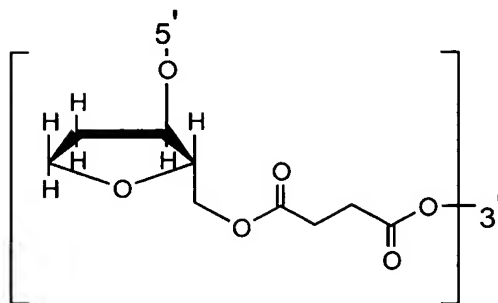
(1) = CLEAVABLE LINKER

(FOR EXAMPLE: NUCLEOTIDE SUCCINATE OR  
 INVERTED DEOXYABASIC SUCCINATE)

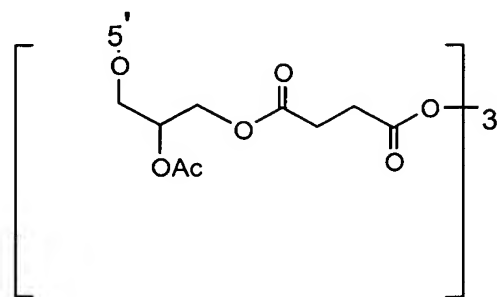


(2) = CLEAVABLE LINKER

(FOR EXAMPLE: NUCLEOTIDE SUCCINATE OR  
 INVERTED DEOXYABASIC SUCCINATE)

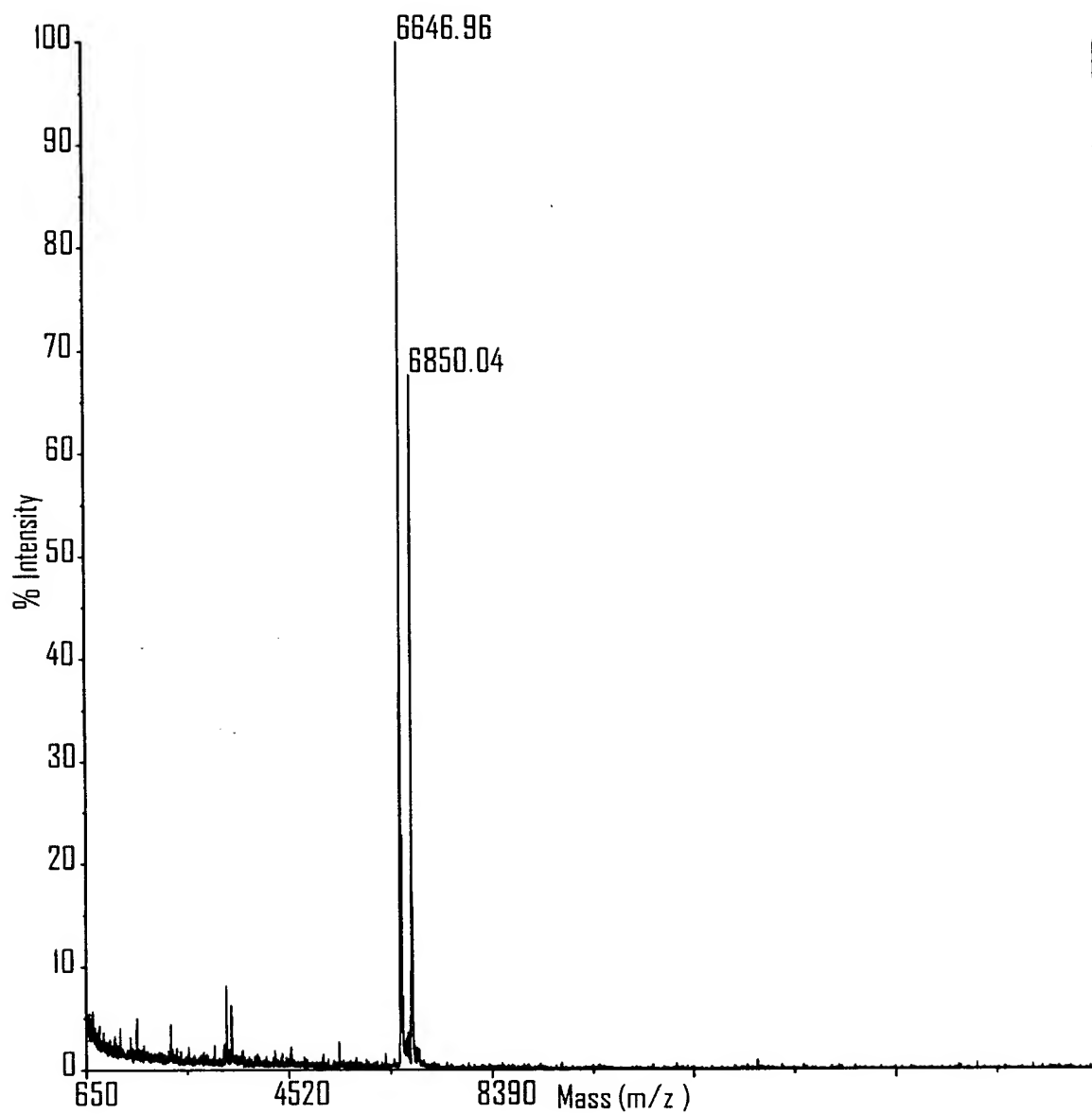


INVERTED DEOXYABASIC SUCCINATE  
 LINKAGE

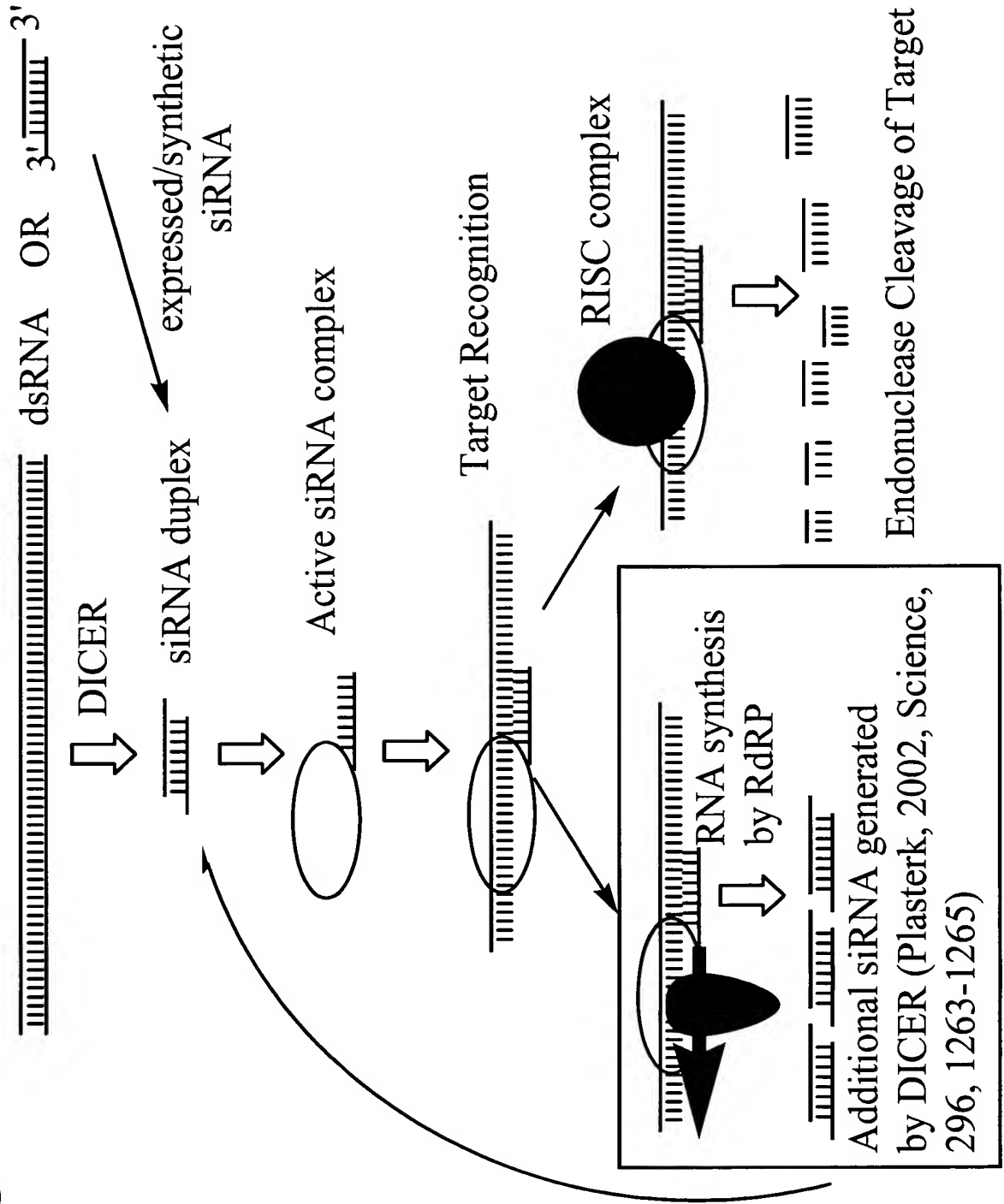


GLYCERYL SUCCINATE LINKAGE

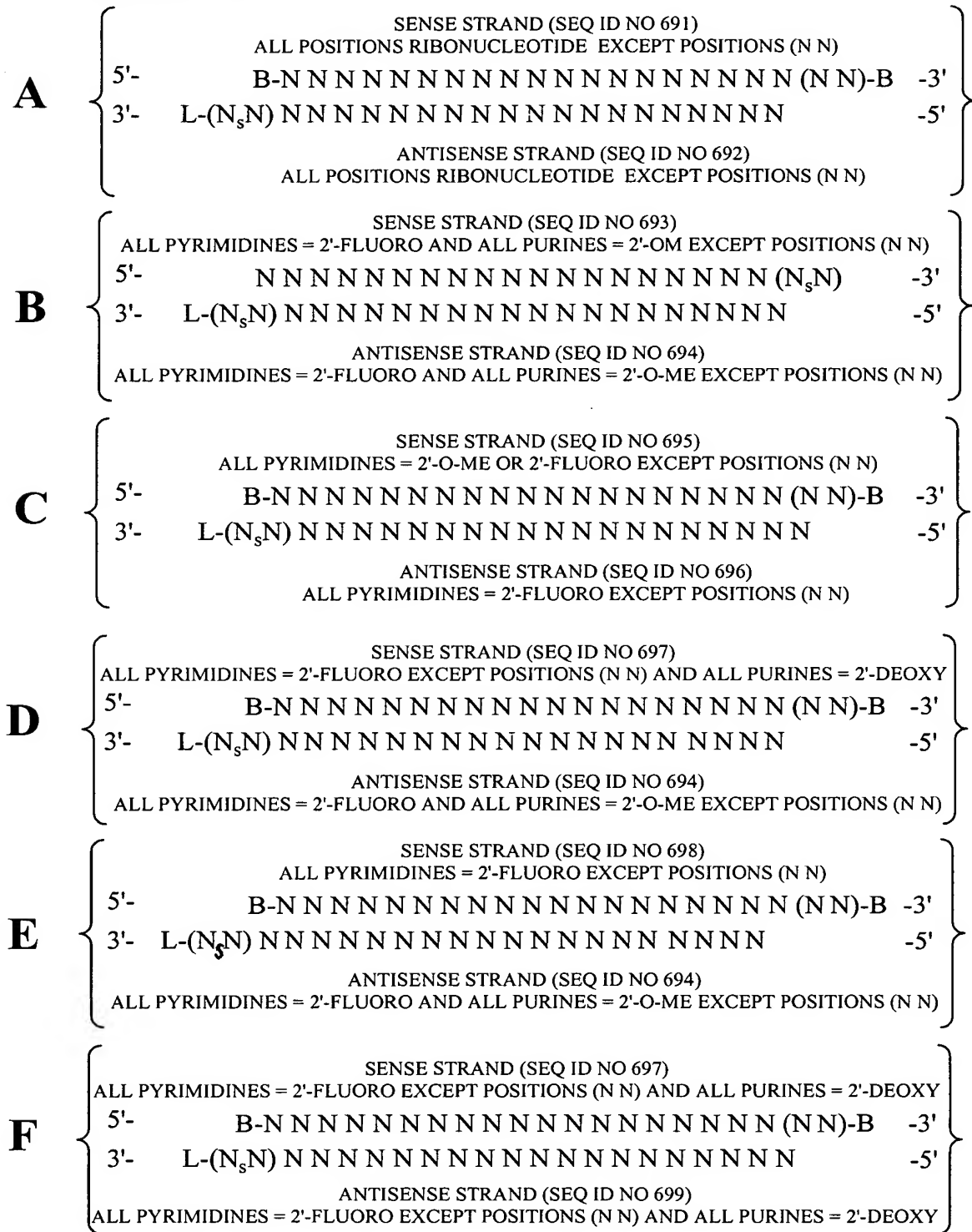
***Figure 2***



**Figure 3**

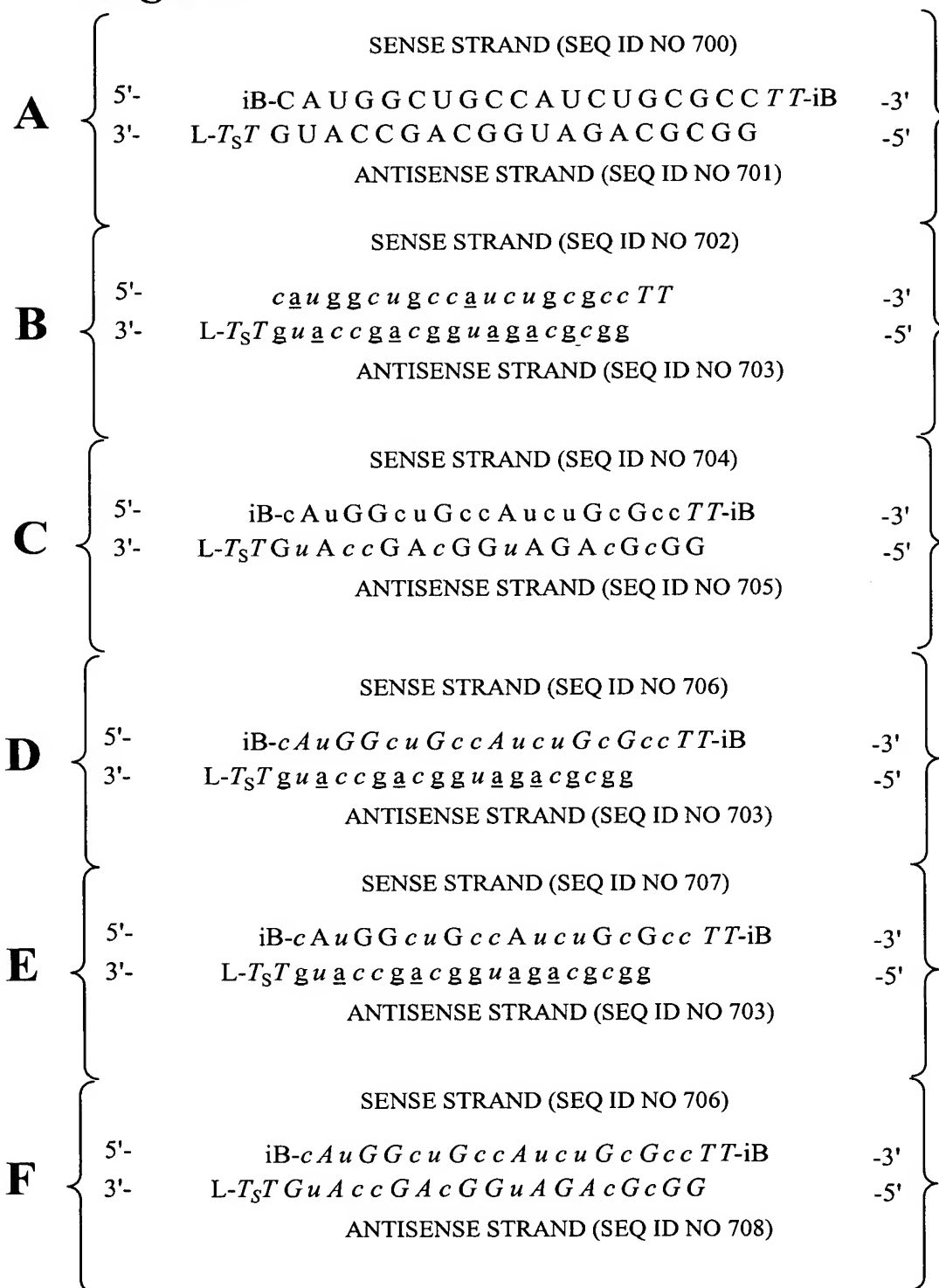


**Figure 4**



POSITIONS (NN) CAN COMPRISE ANY NUCLEOTIDE, SUCH AS DEOXYNUCLEOTIDES  
(eg. THYMIDINE) OR UNIVERSAL BASES  
B = ABASIC, INVERTED ABASIC, INVERTED NUCLEOTIDE OR OTHER TERMINAL CAP  
THAT IS OPTIONALLY PRESENT  
L = GLYCERYL MOIETY THAT IS OPTIONALLY PRESENT  
S = PHOSPHOROTHIOATE OR PHOSPHORODITHIOATE

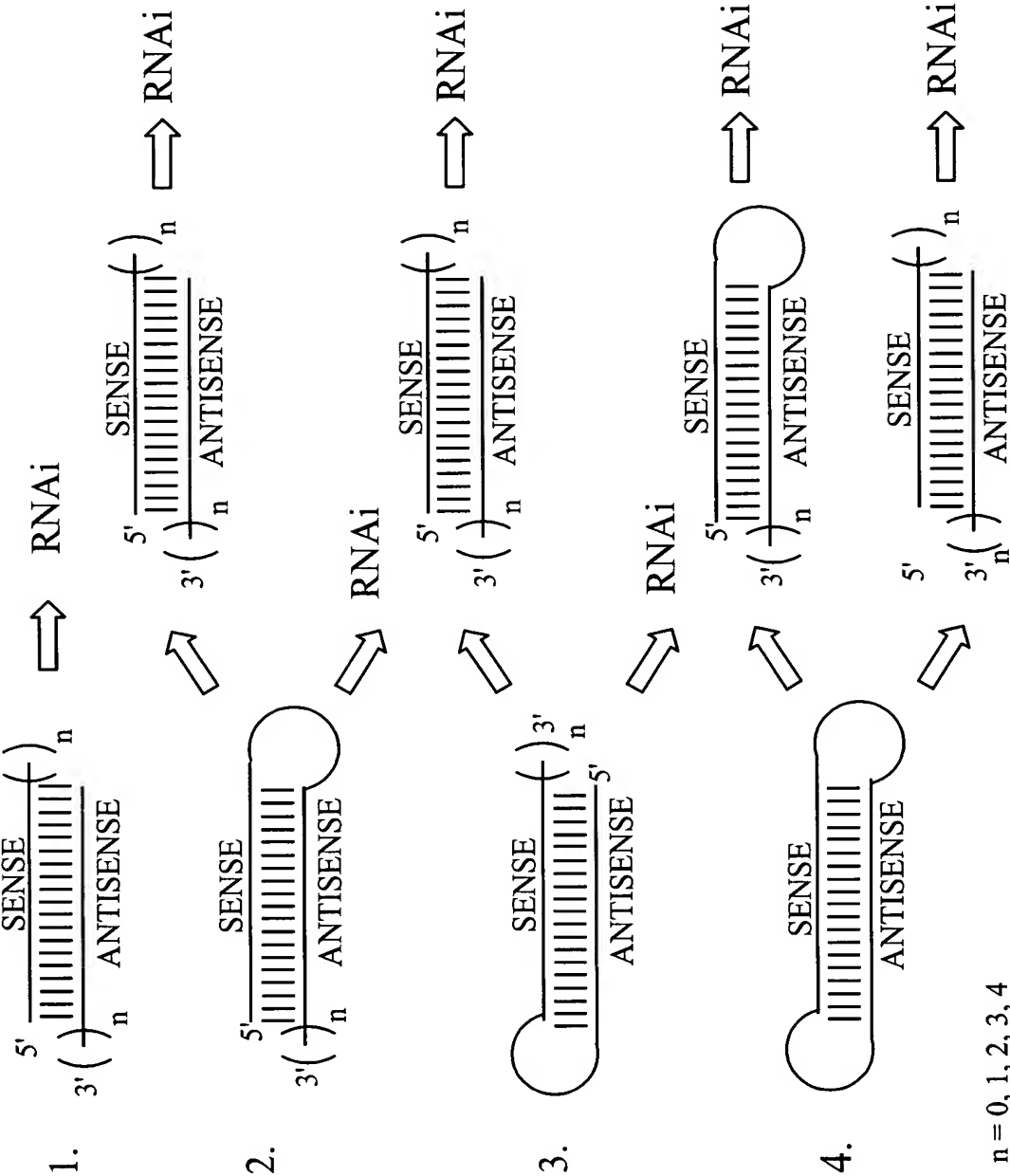
**Figure 5**



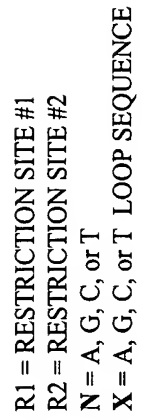
lower case = 2'-O-Methyl or 2'-deoxy-2'-fluoro  
*italic lower case* = 2'-deoxy-2'-fluoro  
underline = 2'-O-methyl

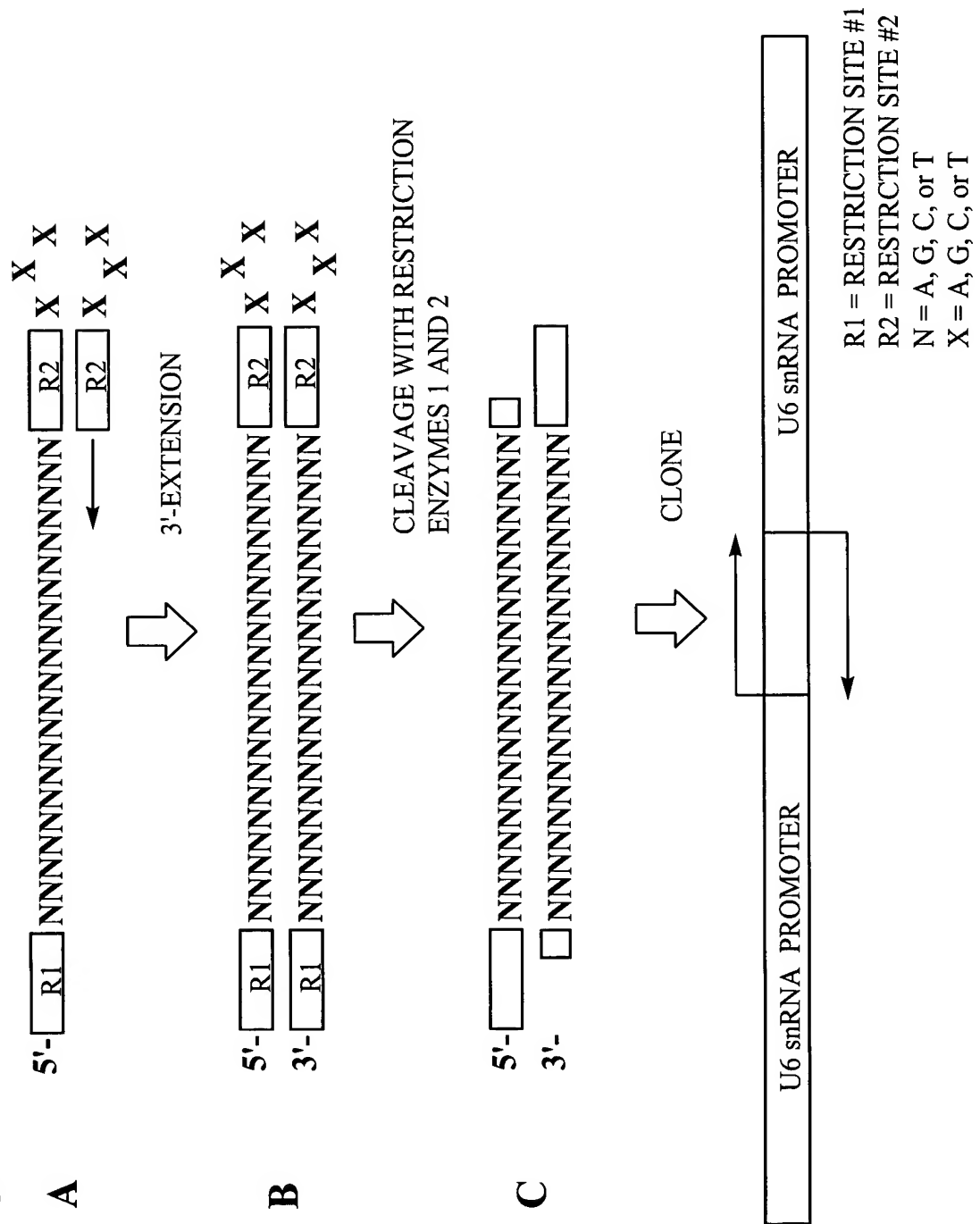
*ITALIC UPPER CASE* = DEOXY  
B = INVERTED DEOXYABASIC  
L = GLYCERYL MOIETY OPTIONALLY PRESENT  
S = PHOSPHOROTHIOATE OR  
PHOSPHORODITHIOATE

Figure 6



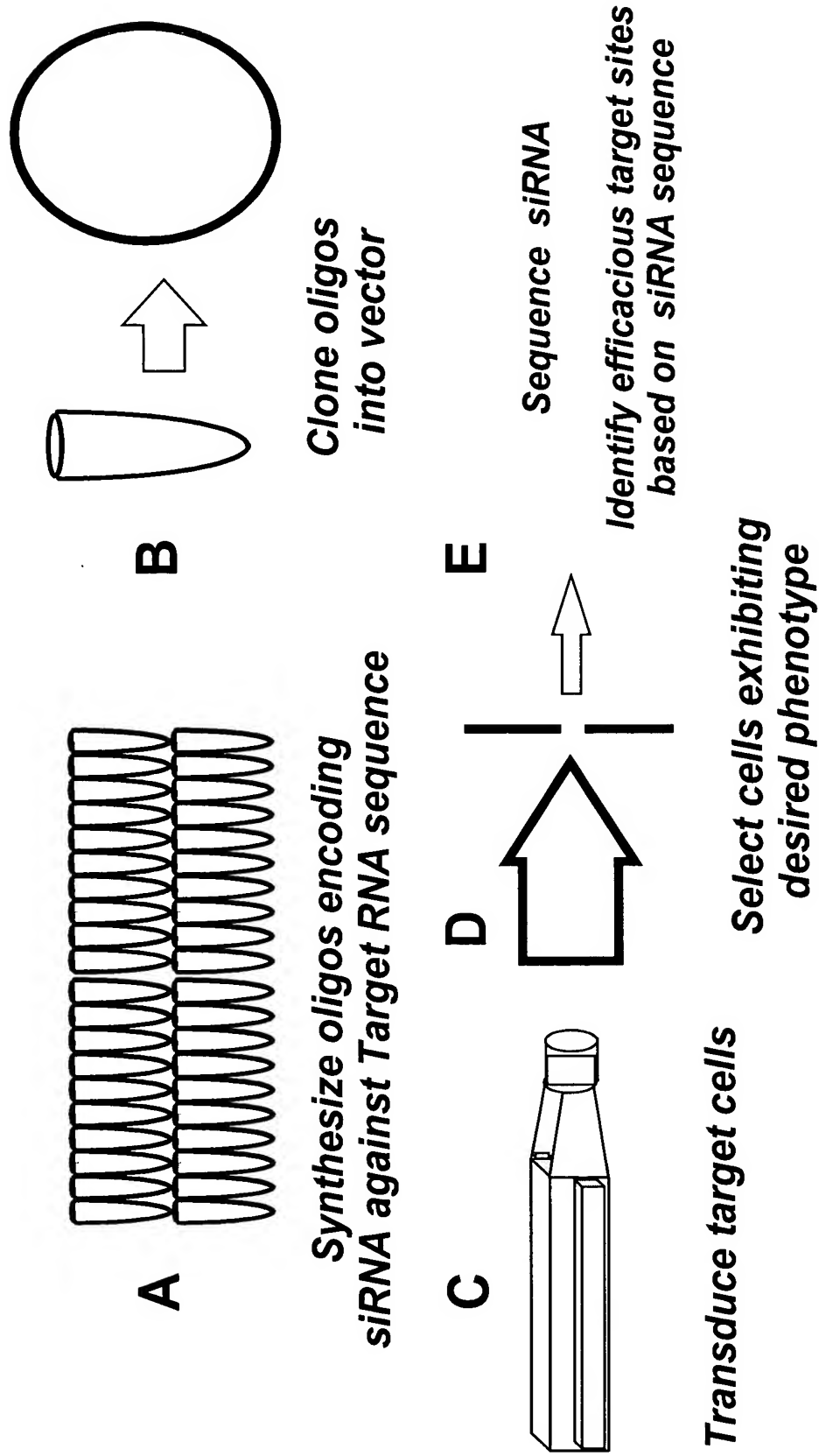
**Figure 7**



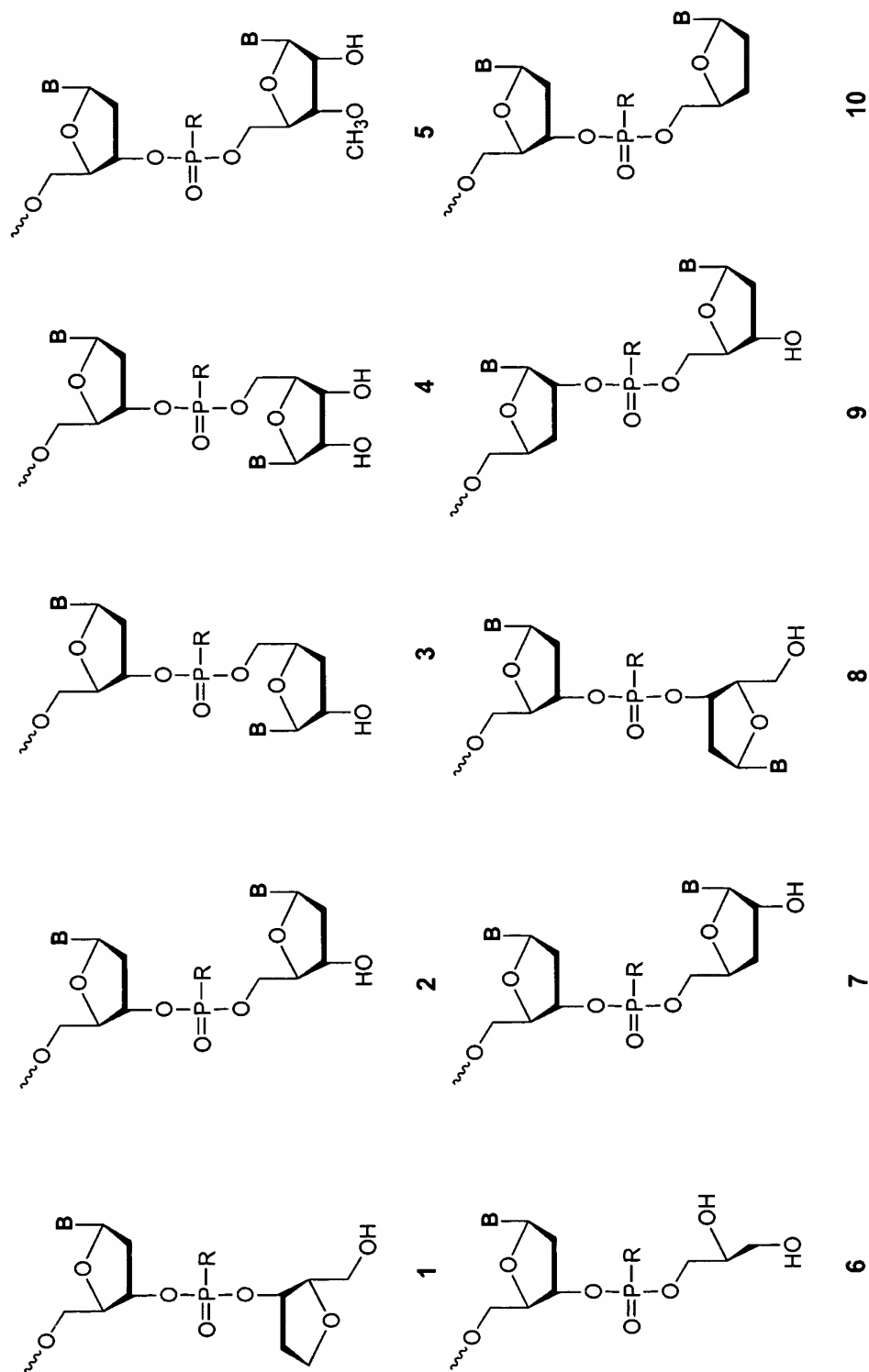




**Figure 9: Target site Selection using siRNA**



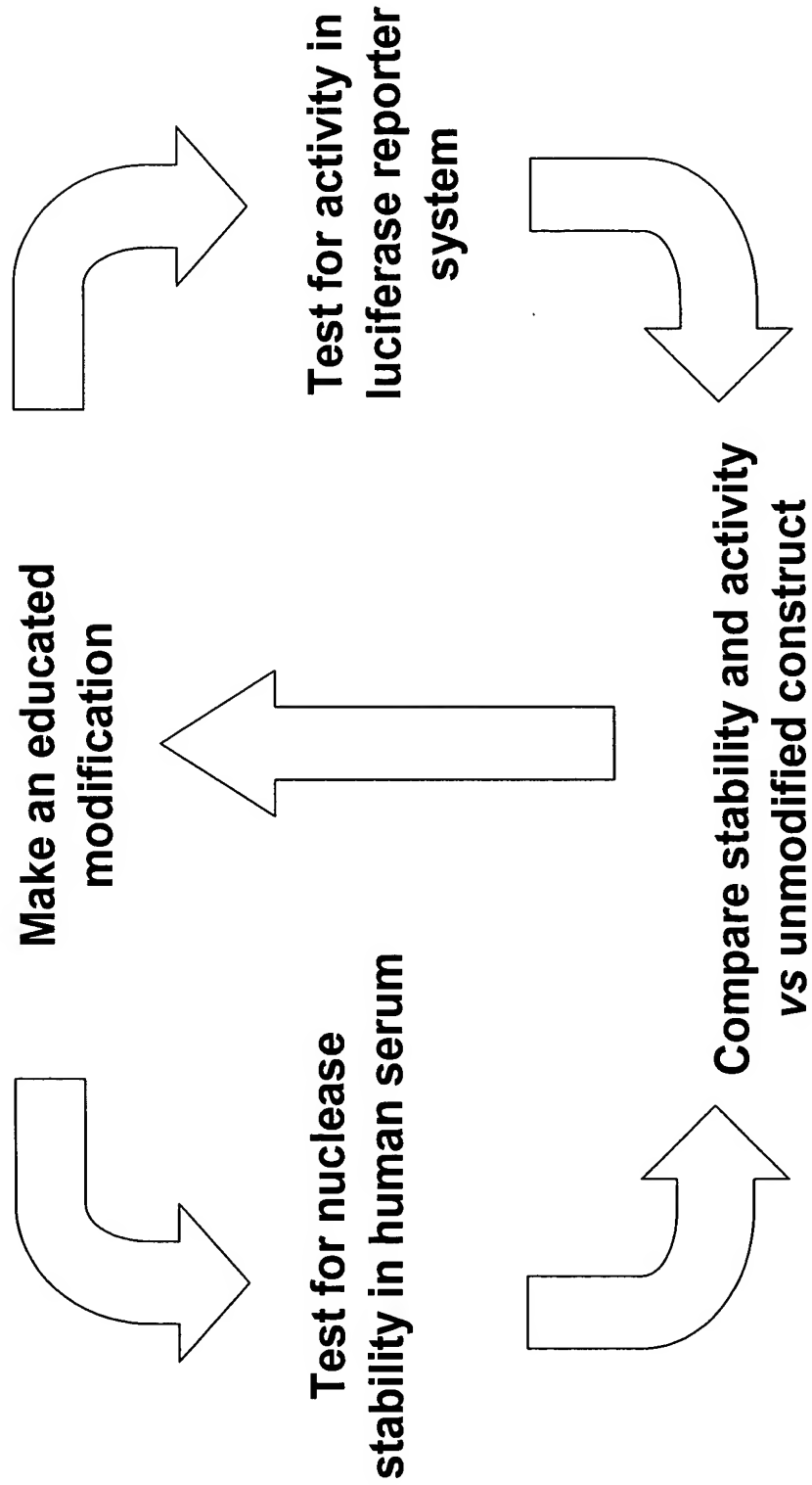
**Figure 10**



R = O, S, N, alkyl, substituted alkyl, O-alkyl, S-alkyl, alkaryl, or aralkyl

B = Independently any nucleotide base, either naturally occurring or chemically modified, or optionally H (abasic).

***Figure 11: Modification Strategy***



**Figure 12: A549 24h BACE mRNA Expression**

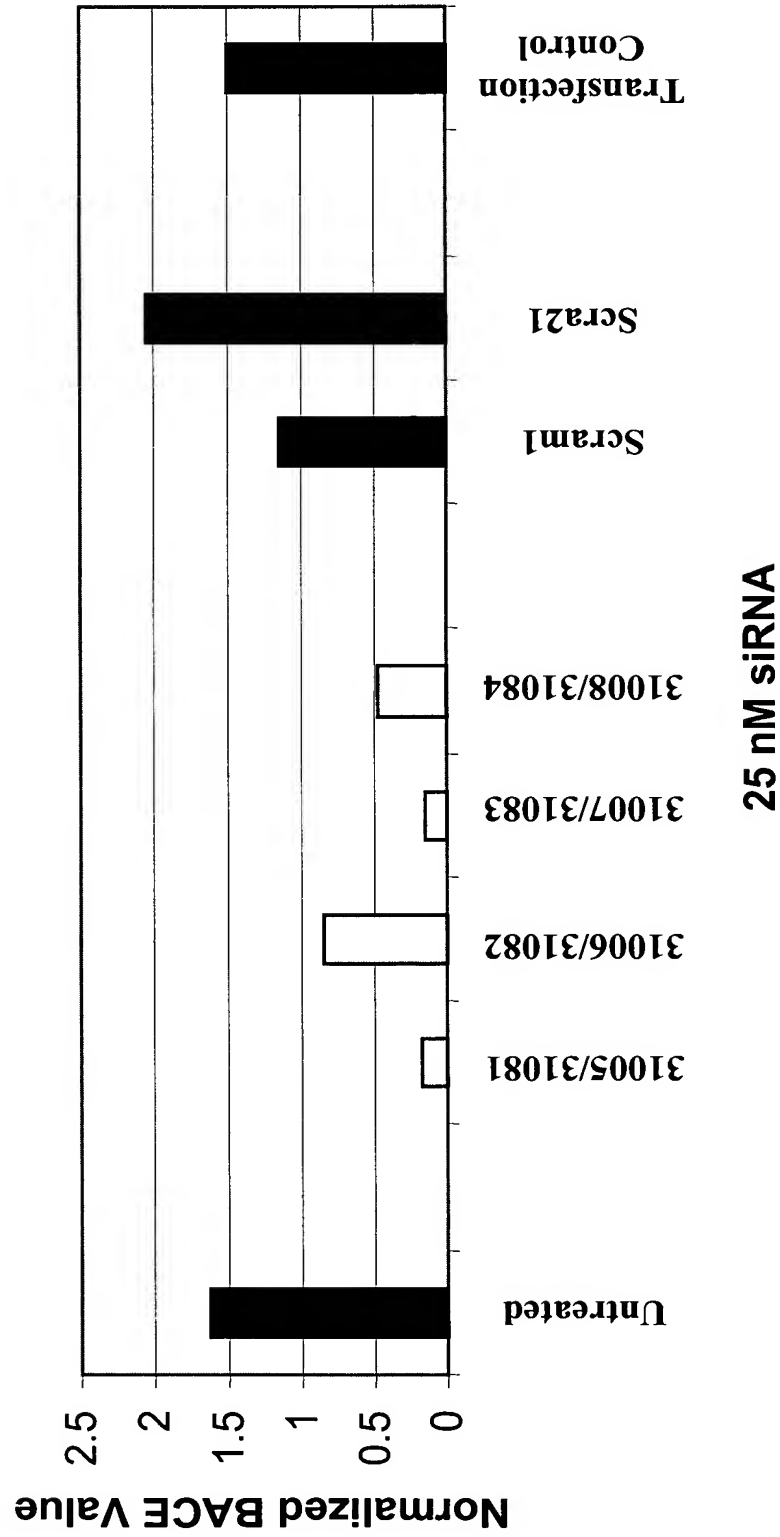


Figure 13: A549 24h BACE mRNA Expression  
using modified siNA

